

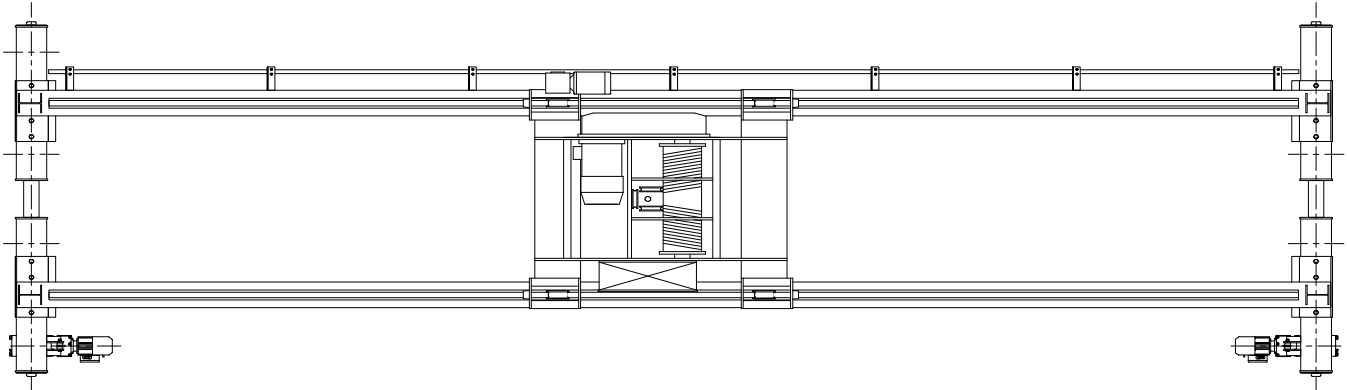


CRANE SPECIFICATIONS – TDR80 Series

Spans to 120' – Capacities to 60 –Ton

Top Riding – Double Girder

1/19/11



1. CraneVeyor TDR80 cranes are designed for Class A through D heavy service with motorized operation, and are designed in compliance with Crane Manufacturer's Association of America (CMAA) Specification No. 70.
2. Maximum girder deflection is 1/888. Girders on spans to 40' may be wide flange sections with required top flange capping or other reinforcement. Longer span girders are welded plate box sections with reinforcing plate diaphragms. ASCE rail or high strength steel square bar trolley rails are attached to the girder top flange.
3. A "bogie" type end truck arrangement is used with 4 wheels at each end. End trucks are fabricated from rectangular steel tube sections and machine bored for bearing and axle assembly alignment. Rail sweep, safety lugs and shock absorbing rubber bumpers are provided at truck ends. Wheel end assemblies are easily removable for replacement.
4. Wheels are 15" diameter, rolled C-1040 steel, double flanged, machined to CMAA 70 tolerances. Drive wheels have rotating axles that are pressed and keyed to the wheels. Drive wheel axles are supported by MCB type housings with lifetime lubricated ball bearings that are mounted in the machined truck frame end. Idler wheels have fixed axles with lifetime lubricated and sealed ball bearings that are selected to withstand the radial and thrust loads. When appropriate for the application or specifications, rotating axle idler wheels and re-lubrication fittings for the bearings can be provided. Standard wheels operate on 60# or 85# ASCE rails, or 105# crane rail, but can be machined to operate on other rail sections, as specified.
5. Drive gearboxes are oil bath enclosed helical/spur gear reducers that are mounted and keyed to the drive wheel axles, and torque arm mounted to the truck frame for direct drive. All gearing is in an oil bath, with no exposed/open gearing. Dual drives are provided. When appropriate for the application or specifications, a hollow shaft worm gear reducer will be provided.
6. Bridge motors are squirrel cage induction type, TEFC, continuous duty, NEMA design B, low slip, suitable for inverter use. Motors are designed for operation in -5° to $+40^{\circ}$ ambient temperature with Class B insulation. For operation in high ambient temperatures or severe environment areas, special motors and insulation can be provided. Motors are direct mounted to the gearbox and include magnetic disc brakes.
7. Standard bridge speed is 60 or 90 FPM, 2-speed with adjustable frequency control. Optional speeds are 50, 75, 125, or 150 FPM.
8. A fused disconnect is provided between the runway conductors and the controls. Standard motor control is adjustable frequency drive (AFD) with dynamic braking, motor overload/over current protection, magnetic mainline contactor, branch fusing, and 115V control transformer in a NEMA 3R enclosure. The AFD control is provided for single, 2-speed or 2-step infinitely variable control, and has programmable acceleration/deceleration, and other advanced features. Controls are for 208/230/460-3-60 power. Specify the power requirement. Other controls, enclosures and voltages are available on application.
9. The bridge steel structure is blast cleaned and provided a primer and a finish safety yellow top
10. Available options include: Full length maintenance walkways along the drive girder; partial or full length walkways along the rear girder; crossover platforms between the front and rear walkways; under the crane work lights; Operator Cabs – either skeleton or full type; Travel limit switches; Hazardous or corrosive environments; and spark resistance.
11. Bridge conductors across the crane are festooned flat cable with trolleys on C track. Pendant push button control from the hoist/trolley is furnished. As options, an independent traveling C track/flat cable pendant system, or radio remote control are available.